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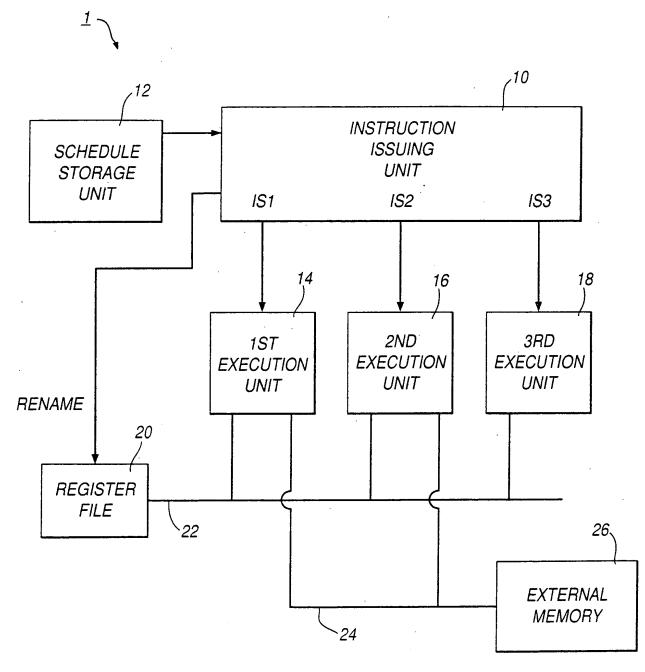
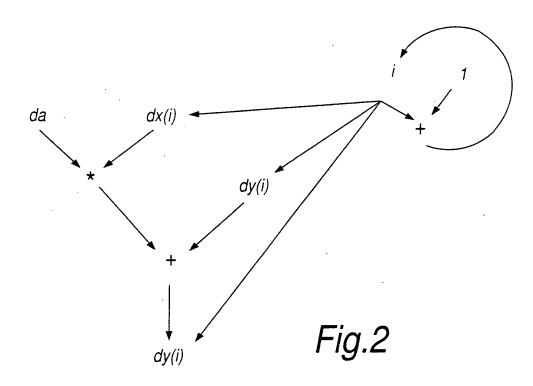
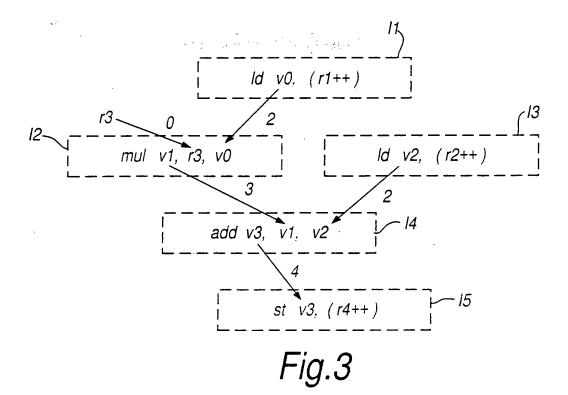


Fig.1





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Cycle	i=0	i=1	i=2	i=3	i=4	i=5
0	L1					
1						
2 .	М	L1				
3	L2					
4		М	L1			
5	Α	L2				
6 7			М	L1		
		Α	L2			
8				М	L1	
9	S		A	L2		
10			·		М	L1
11		S		A	L2	
12						М
13			S		Α	L2
14						
15				S		A
16						
17					S	
18						
19						S

Fig.4

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r 15 r 14 r 13 r 12 r 11 r 10 r 9 r 8 *r* 7 r.6 r 5 r 4 *r3* r 2 r 1 r 0

OFFSET

Fig.5

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			. <u>.</u>						)/7	U			
Iteration 1	1/3								s6 ► r13	S7 = r13.	S7 = r13	58 € 113	58 € 113
	77						S4 v 112	s5►r12	s5► r12				
	11					s2►r10	S2►110 S4►112	s3►r10	s3 ► r10				
Ife	0/1			80 <b>►</b> 19	S0 ► r9	S1 ► 19							
	Instruction			ld v0, (r1 ++) S0 ► r9		mul v1, v0, r3 s1 ► r9	ld v2, (r2++)		S7► 114 add v3, v1, v2				st v3. (14++)
	EA						s6 ► r14	s7► r14	s7► r14	s8 ► r14	s8 ► r14		
	77				S4 ► 113	s5►r13	s5► r13						
Iteration 0	11			111 a ZS	S2+111 S4+113	53▶111	53►111						
Ite	v0	011 <b>4</b> 08	011 <b>4</b> 08	011 € 110									
	Offset Instruction	ld v0, (r1++)		mul v1, v0, r3	ld v2, (r2++)		add v3, v1, v2				st v3, (r4++)		
	Offset	10	10	9	9	8	8	7	7	6	6	5	5
	Cycle	0	1	2	3	4	5	9	7	8	6	10	11

Fig.6(A

Fig.

Id v0, (r1++) -- Id s0, (r1++) mul v1, v0, r3 -- mul s2, s1, r3 Id v2, (r2++) -- Id s4, (r2++)

add v3, v1, v2 --- add s6, s3, s5

st v3, (r4++) -- st s8, (r4++)

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								6	5/1	U							
	1/3												S6 ► r11	S7 × 111	57 111	S8 ► 111	\$8 ₹ 111
	V2										S4 ► r10	s5►r10	s5►r10				
Iteration 3	11									S2 ► 18	S2 ► 18	83 ▶ 18	83 ₹ 18				
Ite	0/							S0 ► r7	S0 ► r7	S1 - 17							
	Instruction							1d v0, (r1++) SO = r7		mul v1, v0, r3	ld v2, (r2++)		add v3, v1, v2				st v3, (r4++)
	1/3										s6 ► r12	S7► r12	S7 × 112	58 ► 112	s8► r12		
	72								S4 - 111	s5►111	S5►111						
Iteration 2	11							s2 ▶ r9	s2 <b>►</b> r9	s3► r9	s3 ▶ r9						
Ite	0,0					SO ► 18	S0 ► 18	S1 ► 18									
	Instruction					ld v0, (r1++)		mul v1, v0, r3	ld v2, (r2++)		add v3, v1, v2				st v3, (r4++)		
	Offset	10	10	6	6	8	8	2	7	9	9	5	5	4	4	3	3
	Cycle	0	1	2	3	4	5	9	7	8	9	10	11	12	13	14	15

# Fig.6(B)

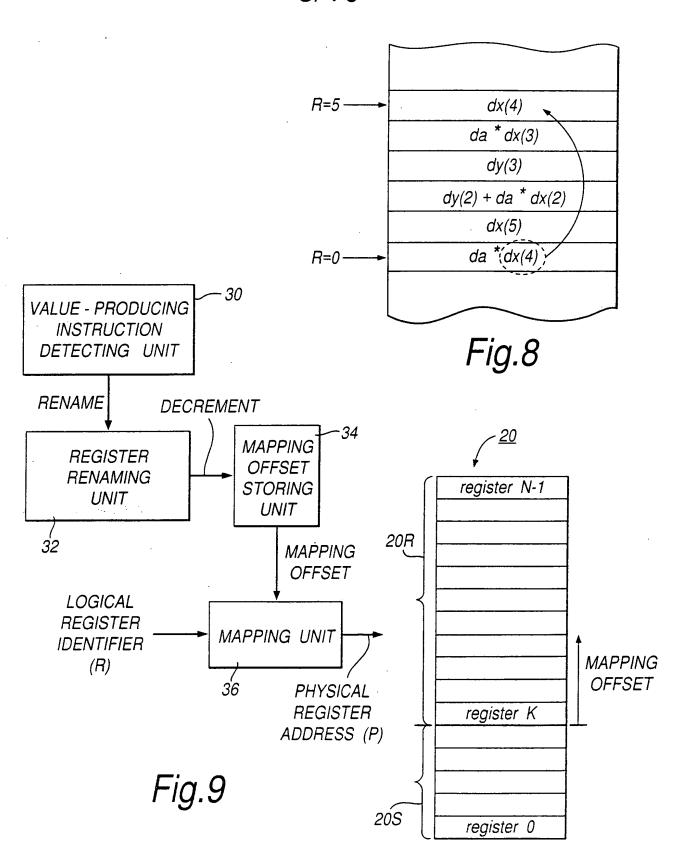
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Cycle	i=0	i=1	i=2	i=3	i=4	i=5
0	L1					
1						
2	М	L1				
3	L2					
4		М	L1			
5	Α	L2				
6			М	L1		
7		A	L2			
8				M (1)	L1 (0)	
9	S		A (3)	L2 (2)		
10					M (5)	L1 (4)
11		S		A (7)	L2 (6)	
12					·	M (9)
13			S		A (11)	L2 (10)
14						
15				S		A (15)
16						
17					S	
18	·					
19						S

Fig.7

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DETERMINE WHICH
LOW - LEVEL INSTRUCTIONS
ARE VALUE - PRODUCING
INSTRUCTIONS AND WHICH ARE
VALUE - REQUIRING INSTRUCTIONS

ASSIGN SEQUENCE NUMBERS
TO VALUES PRODUCED BY
VALUE - PRODUCING INSTRUCTIONS
IN ORDER OF ISSUANCE OF
THOSE INSTRUCTIONS

CODE EACH VALUE - REQUIRING
INSTRUCTION WITH INFORMATION
(E.G. SEQUENCE OFFSET)
DEPENDENT ON SEQUENCE NUMBER
ASSIGNED TO PRODUCED VALUE
REQUIRED BY THE VALUE - REQUIRING
INSTRUCTION

Fig. 10

The first time that the first time that the first time that the first time time time time time time time.

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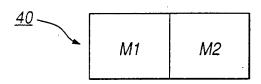


Fig.11

Fig. 12

$$S_I - S_R = q$$

$$S_W - S_E = t$$

$$S_W - S_R = v$$

$$S_E$$
circumference =  $pv$ 

Fig.13